

ARNOLD ARBORETUM
HARVARD UNIVERSITYBULLETIN
OF
POPULAR INFORMATION

JAMAICA PLAIN, MASS.

APRIL 11, 1921

An early spring. An unusually mild winter during which a temperature of zero was recorded only twice at the Arboretum, followed by a March with a temperature of 80° on two days, and an unprecedented high average for the month, has caused many plants to flower earlier than they have flowered here before. On March 21 *Cornus mas*, *Dirca palustris*, *Prunus Davidiana* and *Acer rubrum* were in full flower. *Rhododendron dahuricum* and *R. mucronulatum* were opening their first buds, and on March 26 the first flowers on several of the Forsythias and on *Magnolia stellata* had opened, several Currants and Gooseberries were in bloom, and *Corylopsis Gotoana* was opening its innumerable flower-buds. The Silver Maple (*Acer saccharinum*) had flowered on the 9th of March, only eight days earlier than in 1920, although in the severe winter of 1918-19 it was in bloom in the Arboretum on the 28th of February. In earlier years *Cornus mas* has flowered usually as early as April 3 and as late as April 25. In the six years from 1914-1920 *Dirca palustris* which, with the exception of two or three Willows, is the first North American shrub to bloom in the Arboretum, began to flower as early as April 3 and as late as April 15.

The fact that the winter flowering Witch Hazels bloom later in mild winters than they do in exceptionally cold winters is not easy to explain. In the cold winter of 1915-16, and 1918-19, *Hamamelis mollis* was in full flower on January 26 and February 9. In 1916 *Hamamelis japonica* was in flower on January 26 and in 1919 the flowers were fully open during the first week in February. This year the flowers on these two plants did not open until the first week of March. On

March 28 the thermometer fell from 78° at noon to 18° during the following night, and many flowers were injured or destroyed.

This unusual spring has made it possible to obtain some useful conclusions on the value in this climate of some of the early-flowering trees and shrubs. It has again shown that the flowers most easily injured by spring frosts are those of the Magnolias, and especially of *Magnolia stellata*, and of the earliest flowering Rhododendrons. This year only a few of the Magnolia buds had opened and the plants on the 6th of April are well covered with flowers which, although perhaps rather smaller than usual, are not discolored. Every flower and flower-bud on every plant of *Rhododendron dahuricum* has been killed, and the first flowers of *R. mucronulatum* are ruined. The flowers of *Dirca palustris* have been injured and those of *Corylopsis Gotoana* have been killed. Not more than one per cent. of the flowers of the Asiatic Forsythias and their hybrids have been injured, and the damage is so small that the general appearance of the plants is not affected by it. On the European species a larger percentage of buds has been injured. The flowers of *Cornus mas*, the Cornelian Cherry, were not injured by the sudden change of temperature and the trees in the Arboretum have not before been more thickly covered with their clusters of bright yellow flowers. The fact that severe spring frosts do not injure the flowers of this Cornel greatly adds to its value for the decoration of parks and gardens in regions with an uncertain spring climate.

The Cornelian Cherry is a native of southern Europe, and western Asia and Siberia, and is a large, shapely shrub ten or twelve feet high and broad, or if pruned when young to a single stem a tree with a short trunk and wide-spreading branches. The flowers are pale yellow, and are borne in compact clusters in the axils of the unfolding leaves, and although individually small are produced in such profusion that they cover the branches. The leaves, which are large and dark green, are handsome but fall in the autumn, like those of many other European trees and shrubs, without change of color. The fruit is of the shape and size of a small olive, and is bright scarlet and lustrous. Plants said to be of a yellow-fruited form have been planted several times in the Arboretum but the fruit has always been scarlet. The flesh of the fruit is sweet, of a rather agreeable flavor, and in Europe is sometimes made into a preserve. For regions too cold for the successful cultivation of the Forsythias the Cornelian Cherry is the handsomest of early flowering shrubs with yellow flowers. In its native countries it often grows in calcareous soil and should, therefore, prove valuable in the middle western states. A hundred years ago when the number of handsome plants available for American gardens was not as large as it is today the Cornelian Cherry was more often planted here than it is now, and it is doubtful if it can now be found in many American nurseries. Few exotic shrubs, nevertheless, are better worth the attention of northern nurserymen.

Forsythias. In spite of the loss of a few of their expanding flower-buds the Asiatic Forsythias have not often been in better bloom in the Arboretum, for the cold of severe winters like those of 1915 and 1916 too often kills the flower-buds. None of the newly discovered Asiatic

species are as handsome garden plants as some of the hybrids between the Chinese *F. suspensa Fortunei* and *F. viridissima*, to which the general name of *Forsythia intermedia* has been given. The best of these, the var. *spectabilis*, is the handsomest Forsythia which has yet been seen in the Arboretum. The flowers are larger and more abundant than those of either of its parents, and of a deeper color. Other distinct and handsome forms are var. *primulina* and var. *pallida*. The former, which appeared as a seedling in the Arboretum a few years ago, has primrose colored flowers; the flowers of the latter are pale straw color and paler than those of other Forsythias. Forsythias are often badly planted; they require space in which to spread their long gracefully arching branches and are not suitable for small gardens. To be most effective they should be planted as in the Arboretum, in a great mass on a bank or hillside. A Forsythia should never be planted nearer than ten or twelve feet to a road or path, for if there is not enough room between path and plant for its natural growth the side branches must be cut away and an ugly, awkward, bare-stemmed specimen will be left. In suburban gardens in which the care of plants is usually left to the mercy of the jobbing gardener, the branches of Forsythias and of many other shrubs are often cut back in winter or early spring. This destroys the beauty of the plants, and as Forsythias produce their flowers on the branches of the previous year most of the flowers are sacrificed. If a Forsythia must be pruned it should be done just after the plant has flowered, and the oldest stems and branches should be entirely removed that younger ones may grow naturally.

Asiatic Cherries. Like other plants these Cherries are flowering this year from three to four weeks before their normal time. The flowers of the earliest Cherry, *Prunus tomentosa*, were fully open on the 6th of this month. It is a native of northern China and a shrub only five or six feet high, and when it has not been crowded sometimes ten or fifteen feet in diameter. The flowers open from pink buds as the leaves unfold and the bright red stalk and calyx make a handsome contrast with the white petals. The small fruit ripens in June and is scarlet, covered with short hairs and of a pleasant flavor. This Cherry was first raised by the Arboretum nearly forty years ago and there are a few large plants in the Boston parks, but in spite of its beauty and handsome flowers it has not yet caught the popular fancy. As a fruit plant it has received attention in Manitoba and the Dakotas where it has proved hardy and promises to be valuable. The variety from western China (var. *endotricha*) flowers a few days later.

Prunus subhirtella opened its first flowers on April 7, and unless the buds are injured by cold it will be in full bloom when this Bulletin reaches its eastern Massachusetts readers. This is the "Japanese Spring Cherry" which has been described by a traveller in Japan who has made an exhaustive study of its Cherry-trees as "the most floriferous and perhaps the most delightful of all Japanese Cherries." When its branches are covered with its pink drooping flowers no other large shrub or small tree which can be grown in northern gardens is more beautiful; and the flowering of the "Japanese Spring Cherry" is one of the great events of the Arboretum year; and this spring the trees

promise to be more beautiful than ever before. Unfortunately *Prunus subhirtella* is still rare in gardens. It is not known as a wild plant, and its seeds produce plants of the type of which it is a form, a tall tree of the Japanese forests known as *Prunus subhirtella* var. *ascendens*, a much less desirable garden plant. *Prunus subhirtella* therefore can be increased only by cuttings or by grafting it on its own seedlings. The Sargent Cherry (*Prunus serrulata* var. *sachalinensis*), for the first time since the trees in the Arboretum were old enough to flower, has not many flowers this spring except on the upper branches, but the Yoshino (*Prunus yeddoensis*), which often loses its flower-buds from extreme cold, promises an unusual bloom this year, as does the white-flowered *Prunus incisa*, one of the best of the recent additions to the Arboretum Cherry Collection.

Several Apricots were in full bloom on April 6. The most conspicuous were a Japanese form of *Prunus Armenaica*, known as "Mikado," and the Siberian *Prunus mandshurica*. The flowers of the so-called "Black Apricot" (*Prunus dasycarpa*) are a few days later and promise to be unusually abundant. The flowers of the Canada Plum (*Prunus nigra*) and of the Chinese Plum (*Prunus salicina*), and of an Almond of northern China (*Prunus triloba*) are also opening their flowers—fore-runners in a season which now promises an unusual flowering of all plants of the Rose Family—Cherries, Plums, Pears, Apples, Hawthorns, Quinces and Roses.

Andromeda floribunda, often called *Pieris floribunda*, was covered with its pure white, fully expanded flowers on the 3rd of April. This is one of the handsomest of the broad-leaved evergreen shrubs which are perfectly hardy in this climate. It is a round-topped plant occasionally eight or ten feet across and four or five feet high, with small, pointed, dark green leaves and terminal clusters of bell-shaped flowers. The flower-buds, which are fully grown in the autumn, are conspicuous and ornamental during the winter. This southern Appalachian shrub is an old inhabitant of gardens, and is still much propagated by nurserymen. After the Laurel (*Kalmia latifolia*) and a few Rhododendrons it is the most valuable broad-leaved ever green which can be grown in the northeastern states.

Mr. J. G. Jack of the Arboretum staff will conduct a Field Class on Saturdays during the spring and early summer, to assist those who wish to gain a more intimate knowledge of the native and foreign trees and shrubs which grow in New England. Instruction will be given in informal outdoor talks and in the examination of the plants. Different botanical groups will be examined at each meeting, although any trees or shrubs found may form subjects for study. No technical knowledge or special preparation is required in order to join the class as the instruction is intended to be simple in character, affording opportunities for questions and answers relating to the specimens under observation. Unless otherwise notified the class will meet promptly at 10 o'clock in the morning, on Saturdays, in the Arboretum, at the Forest Hills entrance.

A low temperature, with a heavy snowfall, on April 11, will probably destroy the flowers and flower-buds of many plants.